

The acoustic receiver network: a sea of opportunities

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Technology does not stand still and it helps us researchers to perform high-quality science! Improving technology allows us to gather continuous information on ocean processes, animal behaviour and environmental variables using automated devices. The acoustic receiver network for instance, allows flexible and cost-efficient spatio-temporal tracking of migratory fish species. This network uses acoustic telemetry to gather the data. In the framework of LifeWatch (<http://www.lifewatch.be>), which was established as part of the European Strategy Forum on Research Infrastructures, the Flanders Marine Institute created this receiver network to support biodiversity research and environmental impact studies. Currently the network exists of 51 receivers, covering both the Belgian part of the North Sea and the Western Scheldt Estuary. Detailed observations of animal movements and behaviour in relation to the aquatic environment will significantly improve our understanding of ecosystem functioning and dynamics (e.g. migration routes, spatio-temporal habitat use and migratory behaviour). In addition, it provides the scientific basis for fisheries management, species protection, marine spatial planning and environmental impact assessments.